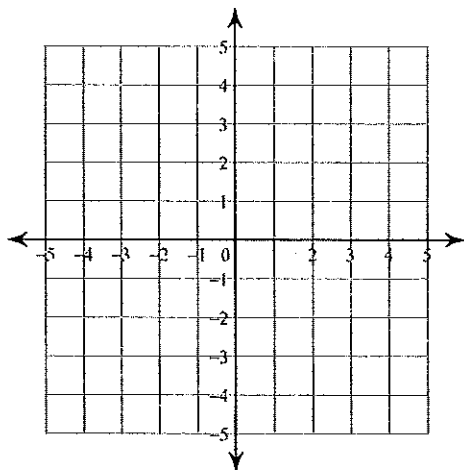


Solving Systems of Linear Equations (Word Problems) Date _____ Period _____

Solve each system by graphing.

1) $y = -\frac{5}{3}x + 3$

$y = -\frac{5}{3}x - 1$



Solve each system by elimination.

2) $-10x - y = -21$

$-20x - 4y = -24$

Solve each system by substitution.

3) $-3x - 21y = 0$

$x + 7y = 0$

Solve each system by ANY METHOD.

4) $6x - 8y = -12$

$-4x + 9y = -3$

- 5) The senior classes at High School A and High School B planned separate trips to New York City. The senior class at High School A rented and filled 14 vans and 1 bus with 258 students. High School B rented and filled 11 vans and 1 bus with 210 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?

variables:

equations:

method:

Solutions:

- 6) The school that Pranav goes to is selling tickets to a fall musical. On the first day of ticket sales the school sold 5 senior citizen tickets and 6 child tickets for a total of \$63. The school took in \$105 on the second day by selling 3 senior citizen tickets and 12 child tickets. What is the price each of one senior citizen ticket and one child ticket?

variables:

equations:

method:

Solutions:

- 7) Sumalee and Scott each improved their yards by planting hostas and shrubs. They bought their supplies from the same store. Sumalee spent \$180 on 14 hostas and 10 shrubs. Scott spent \$59 on 3 hostas and 4 shrubs. What is the cost of one hosta and the cost of one shrub?

variables:

equations:

method:

Solutions:

- 8) Nicole and Totsakan each improved their yards by planting rose bushes and ornamental grass. They bought their supplies from the same store. Nicole spent \$114 on 2 rose bushes and 9 bunches of ornamental grass. Totsakan spent \$78 on 2 rose bushes and 6 bunches of ornamental grass. What is the cost of one rose bush and the cost of one bunch of ornamental grass?

variables:

equations:

method:

Solutions: